REPLACED BY ART 34 AMDT

Claims

1. A conjugate of hydroxyalkylstarch and allergen in which at least one hydroxyalkylstarch is covalently coupled to the allergen.

2. The conjugate as claimed in claim 1, in which the hydroxyalkylstarch is coupled directly or via a linker to the allergen.

3. The conjugate as claimed in claim 1 or 2, in which the hydroxyalkylstarch is hydroxyethylstarch, hydroxypropylstarch or hydroxybutylstarch.

4. The conjugate as claimed in any of claims 1 to 3, in which the hydroxyethylstarch has an average molecular weight of from 1 to 300 kDa, preferably an average molecular weight of from 5 to 200 kDa.

5. The conjugate as claimed in any of the preceding claims, in which the hydroxyethylstarch has a level of molar substitution of from 0.1 to 0.8 and a C_2:C_6 substitution ratio in the range from 2 to 20, in each case based on the hydroxyethyl groups.

6. The conjugate as claimed in any of the preceding claims, in which the allergen has been selected from the group consisting of polypeptides or proteins.

7. The conjugate as claimed in any of the preceding claims, in which the allergen is a glycoprotein.

8. The conjugate as claimed in any of the preceding claims, in which the hydroxyalkylstarch is coupled to the polypeptide chain or to one or more of the saccharide chains of the glycoprotein.

9. A pharmaceutical composition which comprises a conjugate as claimed in any of claims 1 to 8.

10. The pharmaceutical composition as claimed in claim 9, which additionally comprises a pharmaceutically acceptable carrier.

11. The use of a compound as claimed in any of claims 1 to 8 for specific immunotherapy, in particular for hyposensitization.

12. The use as claimed in claim 11 for specific immunotherapy of allergy sufferers in whom an IgE-mediated sensitization whose clinical symptoms have been observed is detected.

13. The use as claimed in claim 11 or 12, where the specific immunotherapy is employed for the therapy of allergies to pollen, mites, mammalian hair (saliva), fungi, insects, foods and natural rubber/latex.

14. The use as claimed in any of claims 11 to 13, where the therapy is employed for the treatment of asthmatics, hay-fever patients and patients showing other types of clinically relevant reactions to immediate-type allergens.

15. The use as claimed in any of claims 11 to 14, where administration takes place subcutaneously, mucosally, orally, perorally or sublingually.

16. The use as claimed in any of claims 11 to 15, where the immunotherapy is carried out preseasonally or perennially for airborne allergens.

17. The use as claimed in any of claims 11 to 16, where the immunotherapy is carried out for people allergic to insects in the rush or ultra-rush method.